

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A substantially purified nucleic acid molecule that encodes [[an]] a maize adenine phosphoribosyl transferase, wherein said nucleic acid molecule comprises the nucleic acid sequence of SEQ ID NO: 5.

Claims 2-11 (Cancelled)

12. (Previously presented) A substantially purified nucleic acid molecule comprising a nucleic acid sequence having the full-length sequence of SEQ ID NO: 5 or complement thereof.

13. (Previously presented) The substantially purified nucleic acid molecule according to claim 12, wherein said nucleic acid molecule consists of a nucleic acid sequence having the full-length sequence of SEQ ID NO: 5 or complement thereof.

14. (Previously presented) A substantially purified nucleic acid molecule having between 90% and 100% sequence identity with a nucleic acid molecule having the full-length sequence of SEQ ID NO: 5 or complement thereof.

15. (Previously presented) The substantially purified nucleic acid molecule of claim 14, wherein said substantially purified nucleic acid molecule has between 95% and 100% sequence identity with SEQ ID NO: 5 or complement thereof.

16. (Previously presented) The substantially purified nucleic acid molecule of claim 15, wherein said substantially purified nucleic acid molecule has between 98% and 100% sequence identity with SEQ ID NO: 5 or complement thereof.

17. (Previously presented) The substantially purified nucleic acid molecule of claim 16, wherein said substantially purified nucleic acid molecule has between 99% and 100% sequence identity with SEQ ID NO: 5 or complement thereof.

18. (Currently Amended) A substantially purified first nucleic acid molecule that encodes [[an]]a maize adenine phosphoribosyl transferase which specifically hybridizes to a second nucleic acid molecule, the second nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO: 5 or complement thereof.

19. (Previously presented) The substantially purified first nucleic acid molecule according to claim 18 wherein said substantially purified first nucleic acid molecule comprises a nucleic acid sequence of SEQ ID NO: 5 or complement thereof.

20. (New) A transformed plant comprising a recombinant nucleic acid molecule having the nucleic acid sequence of claim 12.

21. (New) A transformed host cell comprising a recombinant nucleic acid molecule having the nucleic acid molecule of claim 12.

22. (New) The host cell of claim 21, wherein said host cell is a plant cell.

23. (New) A transformed organism comprising the host cell of claim 21.

24. (New) The transformed organism of claim 23, wherein said organism is a plant.

25. (New) A transformed plant consisting of host cells of claim 21.